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GENERAL FUNGICIDE INFORMATION FOR THE FOREST PATHOLOGIST

by

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Pesticide use in the forest environment is often a controversial subject. Often compounding the problem is confusion about what is being recommended and what alternatives are available. The set of lists and tables which follow evolved as an attempt to have available, information about fungicides which will help resolve some of this confusion.

The kinds of problems which face the practicing pathologist include: the use of trade names (what is the AI in a product mentioned in a phone conversation?); the variety of available formulations; relative human toxicity compared to alternative chemicals; is a particular formulation usable against a particular pest, in a particular environment, etc.? Tables presented in this report attempt to answer these questions. In some of the tables (i.e., the fungicide x disease table) the information is very general. In others (i.e., the trade x chemical name table) the information is specific.

It must be mentioned that this work is in no way intended as a recommendation to use only chemicals. Always consider non-chemical alternatives. Where effective, favor them. But, when chemicals are selected, use the most effective, least toxic one labeled for use against the specific pest in the specific environment of concern.

This set of lists form a working document for forest pathologists. It is not the definitive source of all pesticide information. UNDER NO CIRCUMSTANCES SHOULD THIS WORK BE USED IN LIEU OF THE LABEL! ALWAYS READ AND FOLLOW LABEL INSTRUCTIONS!!! Always check the appropriateness of the chemical against the specific pest in the specific environment of concern.

Neither specific formulations nor specific chemicals are recommended by this work. It is presented as a starting point rather than as an end point. With the answers you get from these tables, the further, more detailed questions of Federal and State registrations and label limits can and must be considered.

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Table 1. Glossary of trade names (left) with the cross referenced chemical names (right).

This listing does not include trade names which include a listed name (i.e., Science Benomyl Systemic Fungicide or Copper Hydro Bordo [Anglicized "Bordeaux"]).

(*) behind a name indicates that the name is an alternative common name, not a trade name; all others in the left column are trade names.

Aaterra	Ethazol
Acquinite	Chloropicrin
Acti-dione (PM or TGF)	Cycloheximide
Acti-dione RZ	Cycloheximide + PCNB
Actispray	Cycloheximide
Acylon	Metalaxyl
Amiral	Triadimefon
Ag-strep	Streptomycin
Agri-strep	Streptomycin
Agrimycin	Streptomycin
Agrox 2-way	Captan + (Diazinon)
Agrox 3-way	Captan + (Diazinon) + (Lindane)
Agrosol S	Captan + Maneb
Allisan	Dicloran
Anisomycin	Streptomycin
Antibiotic Spray Powder	Streptomycin
Apl-Luster	Thiabendazole
Arasan	Thiram
Arathane	Dinocap
Arboral Fungicide	Benomyl
Arbotect	Thiabendazole
AS-50	Streptomycin
Aspor	Zineb
Auragreen	Copper Compound
Avicol	PCNB
Banrot	Thiophanate + Ethazol
Basicop	Copper Compound
Bay-5072	Fenaminosulf
Bay 6072	Fenaminosulf
Bay 22555	Fenaminosulf
Bay MEB 6447	Triadimefon
Bayleton	Triadimefon
Benlate	Benomyl
Bioquin	Copper Compound
Biltex	Maneb
Black Leaf Sheen	Zineb
Blazon	Chlorothalonil
Blitox	Copper Compound
Blue Copperas (*)	Copper Compound
Blue Vitriol (*)	Copper Compound
Bluestone (*)	Copper Compound
Bonide Benomyl	Benomyl
Bordo	Bordeaux Mixture
Boro-spray	Borax
Botran	Dicloran
Botrilex	PCNB
Brascop	Copper Compound
Brassicol	PCNB
Bravo	Chlorothalonil
Brimstone (*)	Sulfur Compound
Brom-O-Gas	Methyl Bromide
Brom-O-Sol	Methyl Bromide + Chloropicrin

Brozone	Methyl Bromide + Chloropicrin
BSZ	Copper Compound
Busan-30	TCMTB
Busan 72A	TCMTB
Cal-Cop	Copper Compound
Caocobre	Copper Compound
Caprane	Dinocap
Capryl	Dinocap
Captane (*)	Captan
Carbamate	Ferbam
Carmel GH-41	Copper Compound
Carpene	Dodine
Cela W-524	Triforine
Celfume	Methyl Bromide + Chloropicrin
Cellu-Quin	Copper Compound
Cercobin	Thiophanate Compound
Cercobin-M	Thiophanate Compound
Chem Neb 54	Maneb + Zinc (≠ Mancozeb)
Chemform	Streptomycin
Chipco Spot Kleen	Thiophanate Compound
Chlor-o-Pic	Chloropicrin
Chloroble M	Maneb
Citcop (4E or 6E)	Copper Compound
Citrusperse	Copper Compound
Cleary 3336	Thiophanate Compound
CNC	Copper Compound
Cobox	Copper Compound
Cobredon	Copper Compound
COCS	Copper Compound
Codex	Copper Compound
Colloidox	Copper Compound
Consul	Sulfur Compound
Cop-O-Cide	Copper Compound
Cop-O-Zinc	Copper Compound
Cop-R-Nap	Copper Compound
Copoloid	Copper Compound
Copox	Copper Compound
Coppersan	Copper Compound
Coprantol	Copper Compound
Copro	Copper Compound
Corsul S	Sulfur Compound
Corozate	Ziram
Corpo	Copper Compound
Correx	Benomyl
Cosan	Sulfur Compound
Cosanil	Zineb + Sulfur + Copper Oxychloride
Coxysan	Copper Compound
Crag Fungicide 974	Dazomet
Crag Nemacide	Dazomet
Croneton	Triadimefon
Cuinlate 2472	Copper Compound
Cuman	Ziram

Cupramar	Copper Compound
Cuprantol	Copper Compound
Cupravit	Copper Compound
"Cupric" Compound (*)	Copper Compound
Cuprin	Copper Compound
Cuprinol	Copper Compound
Cuprocide	Copper Compound
Cuprokylt	Copper Compound
Cuprol	Copper Compound
Cuprosan	Copper Compound
"Cuprous" Compounds (*)	Copper Compound
Cuprovinol	Copper Compound
Cuprox	Copper Compound
Cuproxol	Copper Compound
Curitan	Dodine
Cycosin	Thiophanate Compound
Cyprex	Dodine
Daconil	Chlorothalonil
Dapa	Fenaminosulf
DCNA (*)	Dicloran
DCMOD	Oxycarboxin
Demosan	Chloroneb
Dexon	Fenaminosulf
Dexon D	Chlorothalonil + Fenaminosulf
Diamond	Chlorothalonil
Diazoben (abandoned)	Fenaminosulf
Difolatan	Captafol
Difosan	Captafol
Dikar	Dithane M45 + (Karathane)
Direz	Anilazine
Dithane M-22	Maneb
Dithane M-22 Special	Maneb + Zinc
Dithane M-45	Mancozeb (Comparable)
Dithane Z-78	Zineb
Ditranil (*)	Dicloran
DMTT (*)	Dazomet
DNOCP	Dinocap
Doquadine (*)	Dodine
Dowfume (MC-2 or MC-33)	Methyl Bromide + Chloropicrin
Duosan	Thiophanate Compound
Dyrene	Anilazine
Easout	Thiophanate Compound
Eau Grison	Sulfur Compound
Electrosulph	Sulfur Compound
Elm-Noculate	Benomyl
Elmosan	Benomyl
Elosal	Sulfur Compound
Enovit	Thiophanate Compound
ETCMTB	Ethazol
Ethyl Mercury Phosphate	Benomyl
ETMT	Ethazol
Etridiazol (*)	Ethazol

Evershield T	Thiram
Exotherm	Chlorothalonil
Ferbame (*)	Ferbam
Ferberk	Ferbam
Fermate	Ferbam
Fermide 850	Thiram
Fermocide	Ferbam
Fernacol	Thiram
Fernasan	Thiram + (Gamma BHC)
FMC 9102	Polyram
Folcid (obsolete name) (*)	Captafol
Folosan	PCNB
Folpan	Folpet
For-Cop	Copper Compound
Fore	Mancozeb
Formec 80	Maneb
Forturf (obsolete)	Chlorothalonil
Fuklasin	Ziram
Fumigant-1	Methyl Bromide
Fungi-Sperse	Sulfur
Fungiclor	PCNB
Funginex	Triforine
Fungisan	Thiram
Fungo	Thiophanate Compound
Fytolan	Copper Compound
Gallex	Bacticin
Gerox	Streptomycin
Granol	Maneb + (Lindane)
Granox NM	Maneb + (HCB)
Granox P-FM	Captan + Maneb
Grex	Benomyl
Grotone	Copper Compound
Guanidine	Dodine
Hexaferb	Ferbam
Hexasul	Sulfur Compound
Hexathane	Zineb
Hexathir	Thiram
Hexazir	Ziram
Hizarocin	Cycloheximide
Hokko-mycin	Streptomycin
Hokmate	Ferbam
Iscothane	Dinocap
K-Cop	Copper Compound
Kaken	Cycloheximide
Karathane	Dinocap
Karbam Black	Ferbam
Karbam White	Ziram
Kaurital	Copper Compound
Kauritil	Copper Compound
Kemate	Anilazine
Kilcop	Copper Compound
Knew	Copper Compound

Koban	Ethazol
Kobutol	PCNB
Kocide	Copper Compound
Kolodust	Sulfur Compound
Kolofog	Sulfur Compound
Kolospray	Sulfur Compound
Kop Karb	Copper Compound
Kromad	Copper Compound
Kumulus	Sulfur Compound
Kuprite	Copper Compound
Kypman	Maneb
Kypzin	Zineb
Labilite	Maneb + Thiophanate
Larvacide	Chloropicrin
Lawn Disease Control	PCNB
Lesan	Fenaminosulf
Lesco 4	Maneb
Lignasan BLP	Benomyl
Lonacol	Zineb
Magnetic 6	Sulfur Compound
Magnetic 70	Sulfur + (Urea)
Malachite	Copper Compound
Mancofol	Mancozeb
Mancosan	Maneb + Zineb
Maneba	Maneb
Manebe (*)	Maneb
Manebgan	Maneb
Manesan	Maneb
Manzate	Maneb
Manzate D	Maneb + Zinc
Manzate 200	Mancozeb (comparable)
MeBr (*)	Methyl Bromide
Melprex	Dodine
Mercuram	Thiram + Insecticide
Merpan	Captan
Mertect	Thiabendazole
Meth-O-Gas	Methyl Bromide
Metiram	Polyram
Mezene	Ziram
Micofume	Dazomet
Microcop	Copper Compound
Microfine	Sulfur Compound
Microflotox	Sulfur Compound
Microsperse	Copper + Sulfur
Milbam	Ziram
Mildew King	Copper Compound
Mildex	Dinocap
Miller's Garden Karaspray	Dinocap
Milmer	Copper Compound
Miltox	Copper Compound
Mycozol	Thiabendazole
Mylone	Dazomet

Naptox	Copper Compound
Naramycin	Cycloheximide
Neutrocop	Copper Compound
NIA 9102	Polyram
Niacide	Ferbam
Niklor	Chloropicrin
Nomersan	Thiram
Nu-Cop	Copper Compound
Oleocuivre	Copper Compound
OM 2424	Ethazol
Orthocide	Captan
Orthorix Spray	Sulfur Compound
Oxy Casonil	Zineb
Oxy-Cop	Copper Compound
Oxycop 8LS	Copper + Sulfur
Pamosol 2 Forte	Zineb
Parnon	Parinol
Parzate C	Zineb
Patterson's Root & Crown Rot Control	Fenaminosulf + PCNB
Patterson's Systemic Fungicide	Benomyl
Pearson's Green Lawn Fungicide	PCNB
Pelt Sol	Thiophanate Compound
Perecot	Copper Compound
Perenox	Copper Compound
Pestmaster	Methyl Bromide
PETD	Polyram
Phaltan	Folpet
Phytomycin	Streptomycin
Pic-Clor	Chloropicrin
Picfume	Chloropicrin
Pipron	Piperalin
Plantvax	Oxycarboxin
Polybor 3	Borax
Polyram Combi	Polyram
Polyram M	Maneb
Polyram-Ultra	Thiram
Polyram Z	Zineb
Pomarsol Forte	Thiram
Pomarsol Z Forte	Ziram
Pratt Lawn & Garden Fungicide	Mancozeb
Prezervit	Dazomet
Profume	Methyl Bromide
Pro Turf Fert. & DBS Fungicide	Benomyl + (Fertilizer)
Pyrobor	Borax
Quinondo	Copper Compound
Quintozene (*)	PCNB
RAM	Thiram
Ridomil	Metalaxyl
Rimocidin	Stretopmycin
Rose & Garden Fungicide	Folpet
Rot-Not	Copper Compound
Sanspor	Captafol

Saprol	Triforine
Sears Lawn Fungicide	Maneb
Sofril	Sulfur Compound
Sol Kop	Copper Compound
Sol-U-Cop	Copper Compound
Sopranebe	Maneb
Sperlox-S	Sulfur Compound
Sperlox-Z	Zineb
Spersul	Sulfur Compound
Spotrete	Thiram
Spray-Cop	Copper Compound
Strepcen	Streptomycin
Streptomycine (*)	Streptomycin
Subdue	Metalaxyl
Sulfex	Sulfur Compound
Sulfonimide	Captafol
Sulforon	Sulfur Compound
Sulkol	Sulfur Compound
Sulsol	Sulfur Compound
Sup'R Flo	Maneb
Sup'R-Flo Maneb Flowable	Mancozeb
Syllit	Dodine
TBCS-53	Copper Compound
TBZ	Thiabendazole
TC-90	Copper Compound
Taytox	Copper Compound
Tecto	Thiabendazole
Telone C	Methyl Bromide + Chloropicrin
Termil	Chlorothalonil
Terr-O-Gas	Methyl Bromide + Chloropicrin
Terra-Coat	Ethazol + PCNB
Terracap 10-10	Captan + PCNB
Terrachlor	PCNB
Terrachlor Super-X	Ethazol + PCNB
Terrazole	Ethazol
Tersan LSR	Maneb
Tersan-SP	Chloroneb
Tersan 75	Thiram
Tersan 1991	Benomyl
Thibenzole	Thiabendazole
Thimer	Thiram + (PMA-unregistered insecticide)
Thiogreen Dust	Zineb
Thiolux	Sulfur Compound
Thiophal (*)	Folpet
Thiosan	Thiram
Thiotox	Thiram
Thiovit	Sulfur Compound
Thiramad	Thiram
Thirame (*)	Thiram
Thirasan	Thiram
Thylate	Thiram
Tiazon (*)	Dazomet

Tiezene	Zineb
Tilcarex	PCNB
Tinasad	Thiram
Tirampa	Thiram
TMTD (*)	Thiram
TMTDS (*)	Thiram
Tobaz	Thiabendazole
Topsin	Thiophanate Compound
Topsin-M	Thiophanate Compound
Trametan	Thiram
Trevin	Thiophanate Compound
Tri-Basic	Copper Compound
Tri-Cop	Copper Compound
Tri-PCNB	PCNB
Triangle	Anilazine
Triasyn	Copper Compound
Triazine	Anilazine
Tricarbamix	Zineb + Maneb + Ferbam
Tricarbamix Z	Ziram
Triclor	Chloropicrin
Trifungol	Ferbam
Trimangol	Maneb
Tripomol	Thiram
Triscabol	Ziram
Tritisan	PCNB
Tritofterol	Zineb
Tronabor	Borax
Truban	Ethazol
Tsitrex (*)	Dodine
Tuads (*)	Thiram
Turftox	Thiram
Ulmasan	Benomyl
Ultra-Sofril	Benomyl
Vancide FE-95	Ferbam
Vancide Maneb 80	Maneb + Zinc
Vancide MZ-96	Ziram
Vancide-TM Flowable	Thiram
Vancide TM-95	Thiram
Vancide 89	Captan
Viricuivre	Copper Compound
Vitigran	Copper Compound
Vondcaptan	Captan
Vondodine	Dodine
Wittox C	Copper Compound
Z-C	Ziram
Zebtox	Zineb
Zerlate	Ziram
Zidan	Zineb
Zinc Coposil	Copper Compound
Zinc Copro	Copper Compound
Zinc Metiram	Polyram
Zinkcarbamate	Ziram

Zinosan	Zineb
Zirberk	Ziram
Ziride	Ziram
Zitox	Ziram
Zyban	Thiophanate Compound

Table 2. Cross tabulation of fungicides by disease category. "X" indicates that a formulation of the chemical is appropriate for use against some disease(s) in that category. - Further checking needs to be done to determine which formulation and brand can be used and if it is appropriate in the habitat in question.

Generic Name	Anthracnose Tip Blight	Bacterial Spot	Root Bulb, Corm, Tuber Rot	Downy Mildew	Flower Spots	Fruit Spots Rots	Fungal Leaf Spots, Etc.	Leaf Curl or Blister	Needle Blights & Casts	Powdery Mildews	Rusts	Seed Decay & Damping Off	Seedling Blights: Root & Crown Rot	Sooty Molds Black Mildews	Vascular Wilt	Canker
Anilazine	X			X			X				X	X				
Bacticin		X														X
Benomyl	X		X		X	X	X			X		X	X	X	X	X
Borax			X													
Bordeaux Mix	X	X		X		X	X		X		X	X	X	X		
Captafol		X			X	X										X
Captan	X		X	X	X	X	X	X				X	X	X		
Chloroneb												X				
Chloropicrin			X													
Chlorothalonil	X			X	X	X	X	X	X	X	X			X		X
Copper Compounds	X	X		X		X	X	X	X		X	X	X	X		
Cycloheximide										X	X					
Dazomet			X									X				
Dicloran					X	X										
Dinocap, or Karathane										X						
Dodine	X					X	X	X						X		
Ethazol												X	X			
Fenaminosulf													X			
Ferbam	X		X	X	X		X				X	X		X		
Folpet	X			X	X	X	X			X		X		X		
Mancozeb	X			X	X	X	X	X	X		X	X		X		
Maneb	X			X	X	X	X	X	X		X	X		X		
Metalaxyl				X			X					X				
Methyl Bromide			X													
Oxycarboxin											X					
Parinol							X									
PCNB, or Quintozene									X			X	X			
Piperalin										X						
Polyram	X			X	X	X	X	X	X		X	X		X		
Streptomycin		X														
Sulfur						X	X			X	X					
TCMTB							X									
Thiabendazole			X		X	X	X									
Thiophanate Compounds							X									
Thiram			X		X	X	X				X	X	X	X		
Triadimefon										X						
Triforine										X						
Zineb	X			X	X	X	X	X	X		X	X		X		
Ziram	X			X	X		X				X	X		X		

Table 3. Cross tabulation of fungicides by host/disease-environment. "X" indicates that there are registered formulations of the chemical for the habitat in question. Further checking will need to be done to determine which formulations and brands are usable and that they are appropriate for the host/disease complex involved. Remember that the proposed application site must be listed on the label of the product you use.

	Generic Name	Veg. Gards.	Tree & Urban Ornam.	Nursery Seed O.	Forest	Fruit, Other, etc.	
1	Anilazine	X				X	1
2	Bacticin		X			X	2
3	Benomyl	X	X	X	X	X	3
4	Borax		X		X		4
5	Bordeaux Mix	X				X	5
6	Captafol	X				X	6
7	Captan	X	X	X		X	7
8	Chloroneb			X			8
9	Chloropicrin			X		X	9
10	Chlorothalonil	X	X	X	X	X	10
11	Copper Compounds		X			X	11
12	Cycloheximide		X		X	X	12
13	Dazomet			X			13
14	Dicloran	X	X				14
15	Dinocap, or Karathane	X	X			X	15
16	Dodine	X	X			X	16
17	Ethazol	X		X			17
18	Fenaminosulf	X		X			18
19	Ferbam	X	X	X		X	19
20	Folpet	X	X	X		X	20
21	Mancozeb	X		X		X	21
22	Maneb	X	X	X		X	22
23	Metalaxyl	X	X	X			23
24	Methyl Bromide			X		X	24
25	Oxycarboxin					X	25
26	Parinol		X			X	26
27	PCNB, or Quintozene	X	X	X			27
28	Piperalin		X			X	28
29	Polyram	X				X	29
30	Streptomycin	X				X	30
31	Sulfur	X	X			X	31
32	TCMTB			X		X	32
33	Thiabendazole	X				X	33
34	Thiophanate Compounds	X				X	34
35	Thiram	X		X		X	35
36	Triadimefon			X			36
37	Triforine	X	X			X	37
38	Zineb	X		X			38
39	Ziram	X				X	39

Vapam

Table 4. LD-50 and categories of fungicides registered for use in forestry.

LD-50
& CATEGORY

	Generic Name	Class	Oral mg/kg Rat-PPM	Dermal	Vapor (PPM)	
1	Anilazine	III	2,710	Irritant		1
2	Bacticin	IV	--	Irritant		2
3	Benomyl	IV	10,000			3
4	Borax	III-IV	2,660-5,190			4
5	Bordeaux Mix	IV	--			5
6	Captafol	IV	6,200			6
7	Captan	IV	9,000			7
8	Chloroneb	IV	11,000			8
9	Chloropicrin	II	250	Irritant	20	9
10	Chlorothalonil	IV	10,000	10,000+		10
11	Copper Compounds	II-IV	159-"nontoxic"			11
12	Cycloheximide	II	2 (rat)* 133 (mouse)			12
13	Dazomet	II	500			13
14	Dicloran	III	5,000+			14
15	Dinocap, or Karathane	III	980			15
16	Dodine	III	1,000	Rabbit/1,500+		16
17	Ethazol	III	2,000 mice			17
18	Fenaminosulf	II	64	100		18
19	Ferbam	IV	17,000			19
20	Folpet	IV	10,000+			20
21	Mancozeb	IV	8,000+			21
22	Maneb	IV	6,750			22
23	Metalaxyl	III	669	Irritant		23
24	Methyl Bromide	II	200		200	24
25	Oxycarboxin	III	2,000+ Rabbit/16,000+			25
26	Parinol	III	5,000			26
27	PCNB, or Quintozene	IV	12,000+			27
28	Piperalin	III	2,500			28
29	Polyram	IV	10,000			29
30	Streptomycin	III	9,000	May Irritate		30
31	Sulfur	IV	--	May Irritate		31
32	TCMTB	III	1,590			32
33	Thiabendazole	III	3,100			33
34	Thiopanate Compounds	III	7,500/15,000			34
35	Thiram	III	780			35
36	Triadimefon	III	568	1,000		36
37	Triforine	IV	16,000			37
38	Zineb	IV	5,200			38
39	Ziram	III	1,400			39

*Acute selective action on rats

Table 5. Formulations of various forest fungicides known to be available commercially.

FORMULATIONS
(% A.I. in parenthesis)

	Generic Name	Wettable Powder (WP)* Soluble Powder(SP)*	Flowable (F)** or Liquid Concentrate (LC)*	Dust (D)* Granule (G)*	Conc (EC)*	Fumigant***	
1	Anilazine	WP(50)					1
2	Bacticin				Emulsion		2
3	Benomyl	WP(50)					3
4	Borax			D(100)			4
5	Bordeaux Mix		F(4)				5
6	Captafol	WP(80)	F(4)				6
7	Captan	WP(50)		D(75)		Seed Coat	7
8	Chloroneb	WP(65)					8
9	Chloropicrin					F(2,33)	9
10	Chlorothalonil	WP(75)	F(4.1,6)				10
11	Copper Compounds	WP(VAR.)	F(VAR.)	D(VAR.)	EC(VAR.)		11
12	Cycloheximide	WP(2.1)		D			12
13	Dazomet			D(85,25)			13
14	Dicloran	WP		D			14
15	Dinocap, or Karathane	WP		D			15
16	Dodine	WP(65)					16
17	Ethazol	WP(35)			EC(25)		17
18	Fenaminosulf	WP(35,70)		G(5)			18
19	Ferbam	WP(70,95)	F(4)				19
20	Folpet	WP(50)		D			20
21	Mancozeb	WP(80)					21
22	Maneb	WP(80)					22
23	Metalaxyl	WP					23
24	Methyl Bromide					F(100,98, 67)	24
25	Oxycarboxin	WP(75)	Liq. (5)				25
26	Parinol		LC(4)				26
27	PCNB, or Quintozene	WP(75)			EC		27
28	Piperalin		LC				28
29	Polyram	WP					29
30	Streptomycin	WP(8-65)		D(.1)			30
31	Sulfur			D			31
32	TCMTB		LC(60)		EC		32
33	Thiabendazole	WP(60)					33
34	Thiophanate Compounds	WP(50)					34
35	Thiram	WP,SP(42)		D			35
36	Triadimefon			DG			36
37	Triforine				EC(18)		37
38	Zineb	WP					38
39	Ziram	WP(76,96)	F(4)				39

* 1 (%AI)
** 2 (#AI/gal.)
*** 3 (As liquid which readily voltalizes)

Table 6. Glossary of chemical names cross referenced to trade names.

This listing does not include trade names which include a listed name (i.e., Science Benomyl Systemic Fungicide or Copper Hydro Bordo [Anglicized "Bordeaux"]).

(*) behind a name indicates that the name is an alternative common name, not a trade name; all others in the left column are trade names.

Anilazine -- Direz, Dyrene, Kemate, Triangle, Triazine

Bacticin -- Gallex

Benomyl -- Arboral Fungicide, Benlate, Bonide Benomyl, Correx, Elm-Noculate, Elmosan, Ethyl Mercury Phosphate, Grex, Lignasan BLP, Patterson's Systemic Fungicide, Tersan 1991, Ulmasan, Ultra-Sofril

Benomyl + (Fertilizer) -- Pro Turf Fert. & DBS Fungicide

Borax -- Boro-spray, Polybor 3, Pyrobor, Tronabor

Bordeaux Mixture -- Bordo

Captafol -- Difolatan, Difosan, Folcid (obsolete name) (*), Sanspor, Sulfonimide

Captan -- Captane (*), Merpan, Orthocide, Vancide 89, Vondcaptan

Captan + (Diazinon) -- Agrox 2-way

Captan + (Diazinon) + (Lindane) -- Agrox 3-way

Captan + Maneb -- Agrosol S, Granox P-FM

Captan + PCNB -- Terracap 10-10

Chloroneb -- Demosan, Tersan-SP

Chloropicrin -- Acquinite, Chlor-o-Pic, Larvacide, Niklor, Pic-Clor, Picfume, Triclor

Methyl Bromide + Chloropicrin -- Brom-O-Sol, Brozone, Celfume, Dowfume (MC-2 or MC-33), Telone C, Terr-O-Gas

Chlorothalonil -- Blazon, Bravo, Daconil, Diamond, Exotherm, Forturf (obsolete), Termil

Copper Compounds -- Auragreen, Basicop, Bioquin, Blitox, Blue Copperas (*), Blue Vitriol (*), Bluestone (*), Brascop, BSZ, Cal-Cop, Caocobre, Carmel GH-41, Cellu-Quin, Citcop (4E or 6E), Citrusperse, CNC, Cobox, Cobredon, COCS, Codex, Colloidox, Cop-O-Cide, Cop-O-Zinc, Cop-R-Nap, Copoloid, Copox, Coppersan, Coprantol, Copro, Corpo, Coxysan, Cuinlate 2472, Cupramar, Cuprantol, Cupravit, "Cupric" Compound (*), Curpin, Cuprinol, Cuprocide, Cuprokylt, Cuprol, Cuprosan, "Cuprous" Compounds (*), Cuprovinol, Cuprox, Cuproxol, For-Cop, Fytolan, Grotone, K-Cop, Kaurital, Kauritil, Kilcop, Knew, Kocide, Kop Karb, Kromad, Kuprite, Malachite, Microcop, Mildew King, Milmer, Miltox, Naptox, Neutrocop, Nu-Cop, Oleocuivre, Oxy-Cop, Perecot, Perenox, Quinondo, Rot-Not, Sol Kop, Sol-U-Cop, Spray-Cop, TBCS-53, TC-90, Taytox, Tri-Basic, Tri-Cop, Triasyn, Viricuivre, Vitigran, Wittox C, Zinc Coposil, Zinc Copro

Cycloheximide -- Acti-dione (PM or TGF), Actispray, Hizarocin, Kaken, Naramycin

Dazomet -- Crag Fungicide 974, Crag Nemacide, DMTT (*), Micofume, Mylone, Prezervit, Tiazon (*)

Dicloran -- Allisan, Botran, DCNA (*), Ditranil (*)

Dinocap, or Karathan -- Arathane, Caprane, Capryl, DNOCP, Iscothane, Karathane, Mildex, Miller's Garden Karaspray

Dithane M45 + (Karathane) -- Dikar

Dodine -- Carpene, Curitan, Cyprex, Doquadine (*), Guanidine, Melprex, Syllit, Tsitrex (*), Vondodine

Ethazol -- Aaterra, ETCMTB, ETMT, Etridiazol (*), Koban, OM 2424, Terrazole, Truban

Thiophanate + Ethazol -- Banrot

Ethazol + PCNB -- Terra-Coat, Terrachlor Super-X

Fenaminosulf -- Bay-5072, Bay 6072, Bay 22555, Dapa, Dexon, Diazoben (abandoned), Lesan

Chlorothalonil + Fenaminosulf -- Dexon D

Fenaminosulf + PCNB -- Patterson's Root & Crown Rot Control

Ferbam -- Carbamate, Ferbame (*), Ferberk, Fermate, Fermocide, Hexaferb, Hokmate, Karbam Black, Niacide, Trifungol, Vancide FE-95

Zineb + Maneb +Ferbam -- Tricarbamix

Folpet -- Folpan, Phaltan, Rose & Garden Fungicide, Thiophal (*)

Mancozeb -- Dithane M-45, Fore, Mancofol, Manzate 200, Pratt Lawn & Garden Fungicide, Sup'R-Flo Maneb Flowable

Maneb -- Biltex, Chloroble M, Dithane M-22, Formec 80, Kypman, Lesco 4, Maneba, Manebe (*), Manebgan, Manesan, Manzate, Polyram M, Sears Lawn Fungicide, Sopranebe, Sup'R Flo, Tersan LSR, Trimangol

Captan + Maneb -- Agrosol S, Granox P-FM

Maneb + Zinc (≠ Mancozeb) -- Chem Neb 54

Maneb + Zinc -- Chem Neb 54, Dithane M-22 Special, Manzate D, Vancide Maneb 80

Maneb + (Lindane) -- Granol

Maneb + (HCB) -- Granox NM

Maneb + Thiophanate -- Labilite

Maneb + Zineb -- Mancosan

Zineb + Maneb + Ferbam -- Tricarbamix

Metalaxyl -- Acylon, Ridomil, Subdue

Methyl Bromide -- Brom-O-Gas, Fumigant-1, MeBr (*), Meth-O-Gas, Pestmaster, Profume

Methyl Bromide + Chloropicrin -- Brom-O-Sol, Brozone, Celfume, Dowfume (MC-2 or MC-33), Telone C, Terr-O-Gas

Oxycarboxin -- DCMOD, Plantvax

Parinol -- Parnon

PCNB -- Avicol, Botrilex, Brassicol, Folosan, Fungiclor, Kobutol, Lawn Disease Control, Pearson's Green Lawn Fungicide, Quintozene (*), Terrachlor, Tilcarex, Tri-PCNB, Tritisan

Cycloheximide + PCNB -- Acti-dione RZ

Fenaminosulf + PCNB -- Patterson's Root & Crown Rot Control

Captan + PCNB -- Terracap 10-10

Ethazol + PCNB -- Terra-Coat, Terrachlor Super-X

Piperalin -- Pipron

Polyram -- FMC 9102, Metiram, NIA 9102, PETD, Polyram Combi, Zinc Metiram

Streptomycin -- Ag-strep, Agri-strep, Agrimycin, Anisomycin, Antibiotic Spray Powder, AS-50, Chemform, Gerox, Hokko-mycin, Phytomycin, Rimocidin, Strepcen, Streptomycine (*)

Sulfur Compound --Brimstone (*), Consul, Corsul S, Cosan, Eau Grison, Electrosulph, Elosal, Fungi-Sperse, Hexasul, Kolodust, Kolofog, Kolospray, Kumulus, Magnetic 6, Microfine, Microflotox, Orthorix Spray, Sofril, Sperlox-S, Spersul, Sulfex, Sulforon, Sulkol, Sulsol, Thiolux, Thiovit

Sulfur + (Urea) -- Magnetic 70

Copper + Sulfur -- Microsperse, Oxycop 8LS

TCMTB -- Busan-30, Busan 72A

Thiabendazole -- Apl-Luster, Arbotect, Mertect, Mycozol, TBZ, Tecto, Thibenzole, Tobaz

Thiophanate Compound -- Cercobin, Cercobin-M, Chipco Spot Kleen, Cleary 3336, Cycosin, Duosan, Easout, Enovit, Fungo, Pelt Sol, Topsin, Topsin-M, Trevin, Zyban

Thiram -- Arasan, Evershield T, Fermide 850, Fernacol, Fungisan, Hexathir, Nomersan, Polyram-Ultra, Pomarsol Forte, RAM, Spotrete, Tersan 75, Thiosan, Thiotox, Thiramad, Thirame (*), Thirasan, Thylate, Tinasad, Tirampa, TMTD (*), TMTDS (*), Trametan, Tripomol, Tuads (*), Turftox, Vancide-TM Flowable, Vancide TM-95

Thiram + (Gamma BHC) -- Fernasan

Thiram + Insecticide -- Mercuram

Thiram + (PMA-unregistered insecticide) -- Thimer

Triadimefon -- Amiral, Bay MEB 6447, Bayleton, Croneton

Triforine -- Cela W-524, Funginex, Saprol

Zineb -- Aspor, Black Leaf Sheen, Dithane Z-78, Hexathane, Kypzin, Lonacol, Oxy Casonil, Pamosol 2 Forte, Parzate C, Polyram Z, Tritofterol, Zebtox, Zidan, Zinosan, Sperlox-Z, Thiogreen Dust, Tiezene

Zineb + Maneb +Ferbam -- Tricarbamix

Zineb + Sulfur + Copper Oxychloride -- Cosanil

Maneb + Zineb -- Mancosan

Ziram -- Corozate, Cuman, Fuklasin, Hexazir, Karbam White, Mezene, Milbam, Pomarsol Z Forte, Tricarbamix Z, Triscabol, Vancide MZ-96, Z-C, Zerlate, Zinkcarbamate, Zirberk, Ziride, Zitox

PRECAUTIONARY STATEMENT

Pesticides used improperly can be injurious to man, animals, and plants. Follow the directions and heed all precautions on the labels.

Store pesticides in their original containers under lock and key out of reach of children and animals, and away from food and feed.

Apply pesticides so that they do not endanger humans, livestock, crops, beneficial insects, fish and wildlife. Do not apply pesticides when there is danger of drift, when honey bees or other pollinating insects are visiting plants, or in ways that may contaminate water or leave illegal residues.

Avoid prolonged inhalation of pesticide sprays or dusts; wear appropriate protective clothing.

If your hands become contaminated with a pesticide, wash them immediately with soap and water. In case a pesticide is swallowed or gets in the eyes, follow the first aid treatment given on the label and get prompt medical attention. If a pesticide is spilled on your skin or clothing, remove the clothing immediately and wash skin thoroughly. After handling or spraying pesticides, do not eat or drink until you have washed with soap and water.

Do not clean spray equipment or dump excess spray material near ponds, streams, or wells. Because it is difficult to remove all traces of herbicide from equipment, do not use the same equipment for insecticides or fungicides that you used for herbicides.

Dispose of empty pesticide containers promptly. Have them buried at a sanitary landfill dump, or crush and bury them in a level, isolated place.

NOTE: Some states have restrictions on the use of certain pesticides. Check your state and local regulations. Also, because registrations of pesticides are under constant review by the U.S. Environmental Protection Agency, consult your county agent, state extension specialist or FPM to be sure it is still registered for the intended use. For further information or assistance, contact Forest Pest Management, Alexandria Field Office, Pineville, La., 71360, (Telephone: FTS 497-7280, or Commercial 318/473-7280).

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GENERAL FUNGICIDE INFORMATION FOR THE FOREST PATHOLOGIST

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